

Report

**Environmental Policies and
Institutions for Central Asia (EPIC)
Program Task 4:
Greenhouse Gas Emissions
Reduction Initiative (GGERI)**

April 2001

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for Central Asia (EPIC) Program Task 4:
Greenhouse Gas Emissions Reduction Initiative (GGERI)**

**Final Report and Quarterly Report
January–March 2001**

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List of Acronyms

AIJ	Activities Implemented Jointly
CAR	Central Asian Republics
CJII	Canadian Joint Implementation Initiative
CER	certified emissions reductions
CDM	Clean Development Mechanism
CCC Center	Climate Change Coordination Center, Kazakhstan
CCI	Climate Change Initiative
CHP	combined heat and power generation
COP/MOP	Conference of Parties/Meetings of Parties, UNFCCC
COP-6	Sixth Session of the Conference of Parties, UNFCCC (“Bis”=supplemental)
CTO	Contract Technical Officer
E&E	Europe and Eurasia
ERU	emissions reduction unit
GEF	Global Environment Facility
GHG	greenhouse gas
GGERI	Greenhouse Gas Emission Reduction Initiative
GOK	Government of Kazakhstan
IAC	Interagency Commission on UNFCCC and KP, Kazakhstan
IPCC	Intergovernmental Panel on Climate Change
JI	Joint Implementation
KP	Kyoto Protocol
MET	Ministry of Economy and Trade
MOU	memorandum of understanding
ME	Ministry of Economy
MNREP	Ministry of Natural Resources and Environmental Protection
MF	Ministry of Finance
MFA	Ministry of Foreign Affairs
MVP	monitoring and verification protocol
MRVP	monitoring, reporting, verification protocol
ODA	official development assistance
OECD	Organization for Economic Cooperation and Development
PPP-JI	Program on Pilot Projects for Joint Implementation
PCF	Prototype Carbon Fund, World Bank
SBI	Subsidiary Body for Implementation
SBSTA	Subsidiary Body for Scientific and Technological Advice
TOR	terms of reference
UPDD	uniform project design document
URF	uniform reporting format
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
USIJI	US Initiative on Joint Implementation

Executive Summary

The Republic of Kazakhstan had signed and ratified the United Nations Framework Convention on Climate Change (UNFCCC) by the mid-1990s and committed to the provisions of the Kyoto Protocol in early 1999. The country has undertaken a number of activities to meet these obligations. This has included the preparation of a national inventory of greenhouse gas sources and sinks, the preparation of two National Communications and the initiation of other efforts to build the organizational, institutional, and technical capacity necessary to fulfill its obligations under these international responses to the threat of global climate change (GCC).

This is in part driven by the knowledge that the country's economy remains among the most energy-intensive and least energy-efficient in the world. According to the Pew Center on Global Climate Change, it ranks as the second most energy-intensive economy (after Ukraine) and is thirteenth in the world for cumulative CO₂ emissions from 1950–95. With resumed economic growth and the expected acceleration of its oil and gas sector, Kazakhstan faces the prospect of increased greenhouse gas (GHG) emissions in the absence of stronger mitigation measures.

The progressive and open-minded policies adopted for its participation in the international community's efforts to address the threats of GCC were, in part, driven by the government's acknowledgment of the energy inefficiency of the economy. Kazakhstan also learned early in its interactions on GCC matters that there is relatively strong international interest in its position on GCC, and it has used this interest to help maintain a high profile with the United States and Europe on this subject. GHG reduction efforts can be very cost-effective in the face of this inefficiency, so Kazakhstan stands to benefit from an international search for least-cost approaches to global GHG reduction. The country would gain from international cooperation both through the generation of potentially tradable emissions reduction credits and from ancillary benefits associated with the reduction of other (especially air) pollutants and technology transfer.

The GGERI Activity in Kazakhstan

With this rationale, the Government of Kazakhstan entered into a program of cooperation with the US Agency for International Development to implement the Kazakhstan Greenhouse Gas Emissions Reduction Initiative (GGERI). GGERI assisted Kazakhstani officials in introducing the concepts and practice of flexible mechanisms as outlined in the UNFCCC, specifically the generation of "early credits" consistent with the provisions for Activities Implemented Jointly (AIJ) and in anticipation of an early start of Joint Implementation (JI) and potentially the Clean Development Mechanism (CDM), as proposed under the Kyoto Protocol. The purpose was to help establish a policy and institutional framework to support early credit projects as the basis for generating project-based reductions of GHG emissions.

This document provides a summary report of the key activities, accomplishments, lessons learned, and recommendations derived from the GGERI efforts. As a result of GGERI implementation—and building on earlier achievements of the Environmental Policies and Institutions for Central Asia (EPIC) Program—the Republic of Kazakhstan now has one of the

most advanced policy, legal, regulatory, and institutional frameworks for implementation of market-based, state-of-the-art approaches to the reduction of greenhouse gases and enhancement of carbon sinks among the transition economies of Central, Eastern, and Southeastern Europe and the former Soviet Union.

The GGERI activity in Kazakhstan was conceived by USAID/E&E to become a model for possible replication in other transition economies of Europe and Asia. This report, therefore, serves not only as a presentation of the work and achievements in Kazakhstan, but it also documents important lessons that may be useful to USAID or others seeking to replicate these activities in other countries.

GGERI was implemented through the EPIQ (Environmental Policy and Institutional Strengthening Indefinite Quantity) contract mechanism as a component of the EPIC Program (Task Order 813, Task 4) over approximately one year (from February 2000 through March 2001). It was an initiative jointly supported by the US Agency for International Development Central Asia Regional Mission (USAID/CAR) the USAID Europe and Eurasia Bureau (USAID/E&E) and carried out in cooperation with the Government of Kazakhstan (GOK). International Resources Group, Ltd. the EPIC Program contractor for environmental, energy, and water resource management assistance activities in the Central Asian Republics (CAR) provided the professional expertise and other GGERI inputs.

Institutional and Policy Developments

GGERI sought to work with a broad range of stakeholders—including the government of Kazakhstan, NGOs, academics, donors, potential investors, and project developers. The cornerstone of the initiative was the creation of an institutional structure bringing together the key players to discuss and eventually establish rules and procedures for flexible mechanisms that promote greenhouse gas emissions reductions.

An Inter-Agency Commission (IAC) was established in April 2000 to coordinate all GCC efforts in the country, and a national Climate Change Coordination (CCC) Center was created as its operational body. At its meeting in March 2001 at the conclusion of the EPIC-implemented phase of GGERI activities, the IAC reviewed the CCC Center's work and took the following actions:

- Instructed the CCC Center to finalize early credit MOUs with the World Bank Prototype Carbon Fund (PCF) and the government of the Netherlands, recommending that the Ministries of Economy and of Environmental Protection endorse these arrangements.
- Approved criteria, rules, and procedures for preparation, evaluation, approval, monitoring, verification, and registration of early credit projects as the basis for drafting regulations.
- Instructed the CCC Center to prepare proposals for a financial mechanism to support early credit activities.
- Approved a proposal to legally incorporate the CCC Center as a non-governmental foundation authorized to screen, evaluate, and recommend early credit projects for government approval and to serve as the national focal point for registering projects and tracking their progress and ERCs generated.

- Authorized the CCC Center to perform the core functions of screening, reviewing and preparing recommendations to the IAC (representing the government) for approval of greenhouse gas reduction projects.

The CCC Center is now widely recognized inside and outside Kazakhstan as the lead entity dealing with climate change in Kazakhstan and specifically with early credit projects. It also serves as a main facilitator of communications between potential early credit project investors, sponsors, and developers in Kazakhstan. Designed under GGERI, the CCC Center Web site (www.climate.kz) imparts information on the CCC Center, IAC, Kazakhstan's GCC policies, project description and evaluation procedures, pending proposals, and steps required for the approval of early credits.

GGERI's achieved visible improvement of early credit project development capacity in Kazakhstan and, more broadly, improved understanding of costs and benefits of early credit projects in the government, private sector, and expert community. GGERI outreach efforts led to the accumulation of more than 70 project prospects in the CCC Center database—many of which already have received preliminary support from central, regional, or local governments. Capacity to design and evaluate projects also was improved through the participation of GGERI local staff—together with government and project developers—in regional, national, and international workshops and training. A project tracking and emission reduction registration and crediting system at the CCC Center, developed by GGERI, will support these functions.

Kazakhstan has continued to broaden its climate change policies and international engagement on the subject with strong support from GGERI and other EPIC Program activities. Particular assistance was provided through GGERI to help Kazakhstan better participate in international flexible mechanisms for greenhouse gas reduction. The GOK has committed to host early credit projects and transfer resulting emission reduction credits to investors, and it now supports the development of policies, legislation, and institutions to enable transparent and efficient implementation of these mechanisms. Both the IAC and CCC Center will continue to play central roles in the design, approval, and implementation of this program—explicitly adding GHG emissions reductions to national economic and energy policy.

Lessons Learned

GGERI enjoyed considerable success in establishing the policy and institutional underpinnings for a major project-based GHG emissions effort in the country, and lessons can be learned from this experience that could be useful in similar settings. Cooperation with the range of key stakeholders—government agencies, the local expert community, the private sector, and other interested parties—paid off in terms of acceptance and understanding of new concepts. At the same time, a concerted effort was made to develop local “ownership” of GGERI goals and activities. Investments also were made in the development of CCC Center junior and mid-level local staff as well as a broader cadre of supporting professionals. In government relationships, cooperation was extended beyond the executive branch to include the active participation of the legislature (*Majilis*) and its Committee on Environmental Protection and Natural Resources. Careful attention was given to the perception of GGERI work as integral to national policies and programs for energy, environment, development, and climate change. Emphasis was placed on

the development of good communications materials—briefing materials, presentations and reports—especially those targeting high-level officials and other key players. And finally, what proved to be a productive blend of forums for discussing and communicating important issues was offered—from informal one-on-one meetings to well-prepared workshops and seminars.

At the same time, there also were lessons from challenges encountered that should be taken into account in the design and implementation of similar future efforts:

- GGERI and the government should have paid even greater attention to the legal status of institutions and to the guiding documents regulating early credit projects to enable these new organizations to get up to speed more quickly and to function as fully authorized entities.
- Qualified practical legal expertise should have been readily available to the CCC Center and IAC to meet a variety of demands for policy, legislative, and institutional development.
- There remains a need for closer coordination with UNFCCC Secretariat to ensure compatibility of national and international legal procedures relating to GCC matters.
- The GGERI innovation of placing CCC Center liaison officers in key ministries and agencies was fruitful and should have been done sooner to achieve stronger inter-agency coordination.

GGERI benefited from its emphasis on a consultative and participatory process. Collaborative development of criteria and procedures for project preparation, evaluation, and approval by joint teams greatly increased local ownership of the final product. Another important lesson relates to the importance of identifying and building upon previous GCC and energy sector assistance and giving attention to donor and international coordination. The participatory process took into account state-of-the-art international best GCC practices and the outcomes of ongoing international negotiations. Yet it became clear that significant gaps in the national capacity to design and evaluate investment projects could not be overcome during the GGERI implementation period, and these gaps will be closed only through further partnerships and targeted project development assistance with international expertise.

The GGERI activity was an offspring of the high importance given to climate change in US policy during its design and implementation period. The activity contributed substantially to a positive US–Kazakhstan policy dialogue on this subject, and its successful implementation was possible due to strong support from key government of Kazakhstan agencies and staff.

USAID’s strong support was crucial to the GGERI’s success. During the implementation period, USAID was the only donor agency to provide substantial financial support for the development of institutional capacity to implement greenhouse gas reduction projects in Kazakhstan. By its end, however, the activity had generated widespread attention on the subject, and now several other donor agencies are availing themselves of the CCC Center capacity as an anchor for their programs. The government of Kazakhstan has expressed positive views about USAID’s pioneering role and continuing leadership in this area.

Recommendations and Conclusions

By the end of the GGERI implementation period, only a limited number of the proposals presented to the CCC Center were technically and economically ready for screening and review.

Finding additional resources for project development is clearly a high priority if many good ideas are to be translated into credible projects.

Kazakhstan now has one of the most advanced frameworks among developing or transitioning countries for using project-based international flexible mechanisms for the reduction of greenhouse gas emissions and the enhancement of carbon sinks. This framework will play an important role in future efforts to assist economic, energy, and environmental reform in Kazakhstan and form a basis for the country's participation in UNFCCC and other protocols.

Though Kazakhstan remains one of the least energy efficient countries in the world, it has more than sufficient coal resources and coal-based power generation capacity to meet national electricity requirements under the “business as usual” economic growth scenario. Short-term pricing and demand environments are not conducive to development of new power capacity. So most greenhouse gas mitigation projects based on the planned transfer of emission reduction credits are likely to be centered on supply and demand-side efficiency improvements in the energy, industry, and municipal sectors. Development of renewable energy sources—wind, small hydro, and solar—also is promising at appropriate scales and in response to rural supply bottlenecks, provided that financing mechanisms are identified and other remaining institutional barriers removed.

Several other areas of technical assistance still deserve attention, including:

- Finalization of government regulations (based on documents already prepared by GGERI).
- Completion of the CCC Center's legal development.
- Interim financing of CCC Center operating costs until other sources materialize.
- Assistance to project developers to complete specific feasibility studies and engage investors
- Further project identification for planned donor financing and private investment.
- Continued marketing of credits to be generated and development of international agreements.
- Donor coordination, especially the orientation of upcoming Canadian assistance on project development, and business planning to support specific projects rather than generic training.
- Assistance in preparing an analysis of options and recommendations as the government considers a quantitative target, strategy, and timing for Annex I/Annex B accession.
- Encouraging US investors to develop gas reduction programs in exchange for emissions reduction credits.

The GGERI experience provides an excellent blueprint for USAID programs supporting flexible, market-based approaches to climate change in other transition and developing countries. Further proliferation of national and international markets for emissions reduction credits is expected involving credits generated in these countries. This will make development of national institutional capacity to support effective participation in the international market for emissions reduction credits a high priority if GCC benefits as well as assistance economic growth and sound environmental management are to be realized.

1. Introduction

1.1 Kazakhstan's Strong Global Climate Change Responses

The Republic of Kazakhstan has adopted a very progressive set of open-minded policies for its participation in the international community's efforts to address the threats of global climate change (GCC). This was, in part, driven by the government of Kazakhstan's acknowledgment of the high energy inefficiency in the overall economy. Therefore, it would seem that there is much to be gained from international cooperation to reduce greenhouse gas emissions and the generation of ancillary benefits from reduction of other pollutants and increased technology transfer. Kazakhstan learned early in its interactions on GCC matters that there is surprisingly high international interest in its position on GCC relative to other international agreements.

With these and other reasons in mind, the country signed the United Nations Framework Convention on Climate Change (UNFCCC) in June 1992 and ratified it in May 1995. It signed the Kyoto Protocol in March 1999. Kazakhstan already has undertaken a number of activities to meet its obligations under the UNFCCC, including the preparation of a national inventory of greenhouse gas sources and sinks, the preparation of two National Communications, and the initiation of other efforts to build the organizational, institutional, and technical capacity necessary to carry out its UNFCCC obligations.

1.2 The EPIC Program and GGERI

This document provides a summary report of the key activities, accomplishments, lessons learned, and recommendations of one of these efforts—the Kazakhstan Greenhouse Gas Emissions Reduction Initiative (GGERI). As a result of GGERI implementation—and building on earlier achievements of the Environmental Policies and Institutions for Central Asia (EPIC) Program—the Republic of Kazakhstan now has one of the most advanced policy, legal, regulatory, and institutional frameworks for implementation of market-based, state-of-the-art approaches to the reduction of greenhouse gases and enhancement of carbon sinks among the transition economies of Central, Eastern, and Southeastern Europe and the former Soviet Union.

GGERI was implemented through the EPIQ (Environmental Policy and Institutional Strengthening Indefinite Quantity) contract mechanism as a component of the EPIC Program (Task Order 813, Task 4) over approximately one year (February 2000–March 2001).¹ It was an initiative jointly supported by the US Agency for International Development Central Asia Regional Mission (USAID/CAR) the USAID Europe and Eurasia Bureau (USAID/E&E) and carried out in cooperation with the government of Kazakhstan (GOK).

¹ For the purposes of this report, the term GGERI will be taken to refer only to Task 4 of the EPIQ Task Order (under the EPIC Program) completed in March 2001, even though USAID/CAR and the government of Kazakhstan may choose to retain the name GGERI for subsequent cooperation in this field through a different contract mechanism.

GGERI assisted Kazakhstani officials in introducing flexible mechanisms outlined in the UNFCCC, specifically under the heading of Activities Implemented Jointly (AIJ) and in anticipation of an early start of Joint Implementation (JI) and the Clean Development Mechanism (CDM).² The purpose was to facilitate a more sustainable institutional and regulatory infrastructure for their implementation—and thus move toward achieving real project-based reductions of greenhouse gas emissions.

USAID/CAR awarded International Resources Group, Ltd. the EPIC Program Task Order to carry out environmental, energy, and water resource management assistance activities in the Central Asian Republics (CAR) during February 1, 1998–December 31, 2000. Originally not a part of EPIC, the GGERI activity was added in February 2000.

GGERI was designed to support the development of Kazakhstani national GCC institutions and procedures to encourage greenhouse gas reduction projects—keeping in mind the country’s environmental and economic objectives, as well as Intergovernmental Panel on Climate Change (IPCC) methodologies and UNFCCC provisions. However, implementation of its key parts could not be shielded from the progress (or lack thereof) of international negotiations on rules and modalities for flexible mechanisms that took place during three international meetings during 2000. For this reason USAID/CAR extended GGERI’s implementation period through March 31, 2001. This timing also was meant to provide a smooth transition from USAID’s use of the EPIQ contract mechanism for climate change activities in Kazakhstan to a new contract mechanism.

The GGERI activity in Kazakhstan was conceived by USAID/E&E to become a model for possible replication in other transition economies of Europe and Asia. This final report, therefore, serves not only as a deliverable presenting the work and achievements in Kazakhstan but also as documentation of important processes that may be useful to USAID or others seeking to replicate these activities in other countries. The report covers the period of February 1, 2000, to March 31, 2001, and simultaneously serves both as the quarterly report for the final supplemental three months of work and the final GGERI workshop held in Almaty and Astana March 15–21, 2001.³ It covers:

- Background for implementation of the program
- Key outcomes
- Main activities
- Lessons learned and recommendations for next steps

² Despite continuing uncertainties regarding rules and modalities for international flexibility mechanisms to mitigate greenhouse gas emissions, there is a developing demand for the generation of project-based Emission Reduction Credits (ERC) that would be recognized by various national or international arrangements. Throughout the text of the report, the phrase *early credit projects* will be used to characterize a plurality of future voluntary and mandatory project-based emission reduction and carbon sequestration measures involving international transfer of credits.

³ Activities pertinent specifically to Q2 FY2001 (January–March 2001) are highlighted in bold in Annex 4 to summarize GGERI deliverables.

1.3 The Situation in Kazakhstan at the Outset of the GGERI Activity

As noted, GGERI was made possible due to prior progress in addressing GCC issues by government and non-government stakeholders in Kazakhstan. In part with US government support, local scientists began research on the possible impacts of GCC on environment and socioeconomic systems—agriculture, forestry, industry—beginning in the early 1990s. Early research on greenhouse gas emissions, vulnerability and adaptation was supported by the US Country Studies Program on climate change. The very low energy efficiency of Kazakhstan’s economy and household sector—and thus its vast potential to reduce greenhouse gas emissions through energy efficiency improvements, conservation, and development of renewable energy sources—have been widely recognized for some time by experts, academics, and the Kazakhstan government. Based on emission per unit of GDP, Kazakhstan ranked second in the world in 1995, thus indicating the vast potential for improvement.⁴

From the mid-1990s, the government began to make policy decisions leading—directly or indirectly—to the reduction of greenhouse gas emissions. These included such efforts as the Energy Efficiency and Conservation Law, programs for renewable energy development, and other environmental regulations. Unfortunately, in most cases inadequate resources and ineffective mechanisms were allocated to implement these laws and programs.

Nevertheless, current emissions of greenhouse gasses in Kazakhstan are substantially lower than in 1992 (the first year of its independence and the year UNFCCC was negotiated). Among the reasons for the decline of the emissions levels are:

- Declining economic activity beginning in 1990–91—during the transition away from a planned economy—and a related decline in the production and consumption of energy;
- Closing or downsizing of a large number of defense-related industrial and mining enterprises that were significant energy consumers;
- Restructuring of the economy with a shift from heavy manufacturing toward a larger service sector and the production of consumer goods; and
- Improving energy and materials management practices at private and privatized enterprises.

However, Kazakhstan’s economy remains among the most energy-intensive and inefficient in the world. According to the Pew Center on Global Climate Change, Kazakhstan ranks as the second most energy-intensive economy in the world (after Ukraine) with 54.83 units of energy consumed per dollar of GDP.⁵ In addition, Kazakhstan has historically been a high-emitting country. The Pew Center estimates that Kazakhstan ranks 13th in the world for cumulative CO₂ emissions from 1950–95, with estimated total emissions of some 9,977,622,000 metric tons.⁶ And with resumed economic growth and the expected acceleration of its oil and gas sector, Kazakhstan faces the prospect of increased greenhouse gas emissions in the absence of stronger mitigation measures. Still, even under the national “business as usual” scenario, emissions—

⁴ See Annex 1 of *Equity and Global Climate Change: The Complex Elements of Global Fairness*, by Eileen Claussen and Lisa McNeilly, Pew Center on Global Climate Change, October 1998.

⁵ Claussen and McNeilly, pp. 19, 26.

⁶ Claussen and McNeilly, p. 26.

currently at about half their 1990 levels—are not expected to return to their pre-decline peak any time soon. But current national projections call for a return to 1990 levels sometime during 2010–15 if specific measures to reduce emissions are not taken.

1.4 Responses to Climate Change

In 1997–98, the government began to recognize the potential of international flexibility mechanisms like early credit projects for mobilizing financial resources using technology and technical capacity to modernize the country’s energy assets while increasing energy efficiency and developing renewable energy resources. The government decided to initiate the process of joining Annex I of the UNFCCC (developed and transitioning countries accepting bounds on their greenhouse gas emissions under the Kyoto Protocol) and moved to develop unilateral voluntary binding commitments on greenhouse gas emissions to meet a no-growth promise by all the signatories of the UNFCCC. Government officials, including the President and Minister of Natural Resources and Environmental Protection, made several statements on the matter at various high-level UN meetings and climate change negotiations sessions. In April 2000, just after GGERI’s inception, the government formally requested that the UNFCCC Secretariat help it move forward with its plan to join Annex I of the UNFCCC.

The international donor community recognized Kazakhstan’s active position in addressing GCC and its very large potential to reduce national—and thus global—greenhouse gas emissions. Many bilateral and multilateral donors consider Kazakhstan a key country in this area, and the US has played a leading role in international bilateral GCC-related technical assistance to Kazakhstan since the early 1990s. This has included support for energy sector analysis and reform, development of new environmental regulations, and, specifically, assistance in policy development and capacity building to address GCC. Kazakhstan was a beneficiary of the US-financed Country Studies Program. In the early 1990s this program supported the first national assessment of greenhouse gas emissions, identified possible impacts of GCC on Kazakhstan’s environment and socioeconomic systems, and outlined opportunities for reduction of greenhouse gas emissions. USAID later supported further energy, environment, and climate-change policy development and capacity building. From 1998 to the end of the GGERI activity, the EPIC Program (implemented by the IRG-led group of contractors, which included the Harvard Institute for International Development) was the lead mechanism for US climate change assistance to Kazakhstan. With EPIC, USAID provided financial support to Kazakhstan for, among other things, the following activities:

- Comprehensive national inventories of greenhouse gas emissions for 1992–98;
- Emissions projections based on economic growth and associated capacity using GCC-related energy sector and economic modeling;
- Participation on COP-4, COP-5, COP-6, and other international forums;
- Capacity building for development of concrete projects on greenhouse gas reduction and sink enhancement;
- Capacity building for GCC-related policy-making;
- High-level study tour to the US on GCC flexible mechanisms and other options; and
- GGERI activities in coordination with other GCC inputs.

1.5 GGERI Concept and Deliverables

As noted, GGERI in Kazakhstan was jointly sponsored by USAID/E&E and USAID/CAR as a pilot activity for possible replication elsewhere in Europe and Eurasia. For this reason, the activity was overseen by both the USAID/CAR EPIC Program Contract Technical Officer (CTO) and the GGERI Activity Manager in USAID/E&E.

The principal approach taken by GGERI was to work with policy makers to establish a national Climate Change Office that would assist Kazakhstan by:

- Developing a regulatory and institutional framework for conducting a national early credit project program and concluding bilateral agreements for early credits;
- Creating the capacity to evaluate potential early credit projects on the basis of local and global environmental impacts, contributions to national development, and financial considerations;
- Marketing early credit project opportunities to potential investors; and
- Building institutional capacity to track greenhouse gas credits.

Building on the previous USAID (and other US government agency) assistance to Kazakhstan, GGERI sought to work with a broad range of stakeholders—including the government of Kazakhstan, non-governmental organizations, academics, donor agencies, potential early credit project investors, and project developers. The cornerstone of the initiative was the creation of an institutional structure bringing together different players to discuss and, eventually, legally establish rules and procedures relating to use of flexible mechanisms to promote greenhouse gas emissions reductions.⁷

USAID and the government of Kazakhstan signed a memorandum of understanding (MOU) while laying out the framework for this cooperation (see Annex 1). It called for direct USAID support for the establishment of an Interagency Center on Global Climate Change focusing on early credit project investments in Kazakhstan. The center was to become a functioning government decision-making authority that oversaw the adoption of rules and procedures, selection of high priority sectors, and areas for investment in early credit projects. It would also make final recommendations to government authorities for approval. The center was meant to serve as the agency that would, on behalf of the government of Kazakhstan, evaluate projects, monitor their approval and implementation, track and register resulting emission reduction units, and market opportunities for early credit project investments in Kazakhstan to national and international private and public investors.

The MOU did not require the government of Kazakhstan to provide specific forms of support for the center (such as staffing) as a condition of the USAID funding. Yet Kazakhstani authorities were so eager to move ahead with the idea that they unofficially (through a MNPEP executive order and, thus, yet without a sufficient legal foundation) created the Climate Change Coordination (CCC) Center and further designated the senior GGERI Kazakhstani Policy

⁷ General references to reductions of greenhouse gas emissions can also be taken to include the enhancement of carbon sequestration.

Advisor as the CCC Center’s first director, ad interim. At the same time, this individual was appointed as the UN-recognized “National Focal Point” for all GCC matters in Kazakhstan—notably including a range of topics outside of GGERI’s project-oriented scope. To further blur management and authority lines, the government’s principal contribution to the center (there were no salaries for center staff) and GGERI was to provide joint office space for the still informal CCC Center and the GGERI consultant staff.

This placed the GGERI activity in the unusual and somewhat awkward place of advising the government on the topics described above, even as the CCC Center began to informally operate and develop its identity—with Mr. Kanat Baigarin, a GGERI consultant, as its Director Designate. The GGERI team, comprising an expatriate team leader and local experts and support personnel, was placed in the same office space. In addition, some GGERI staff were based in the EPIC Program Office in Almaty. Mr. Baigarin became the local Co-Team Leader of the GGERI activity.

According to the GGERI Statement of Work (EPIC Program Task 4) and the final approved EPIC Program Work Plan for 2000 (including the GGERI supplement for the first quarter of 2001), the GGERI activity included the following set of eight tasks:

- Contract management and reporting;
- CCC Center legal framework development;
- CCC Center institutional framework development;
- Project evaluation capacity;
- Development of project pipeline;
- Marketing of early credit project opportunities to potential investors;
- Institutional capacity building for tracking greenhouse gas emission reduction credits; and
- Development of a CCC Center Web site.⁸

GGERI staff prepared and submitted monthly reports to the USAID/CAR CTO and USAID/E&E Activity Manager. Written and verbal briefs and updates were also provided at USAID request, both by field-based and US-based staff. At USAID’s request, separate monthly financial tracking was maintained for the GGERI task under the EPIC Program. The GGERI Team Leader presented formal briefings on the status and progress of work to USAID on three occasions: at USAID/E&E in Washington, DC (November 2000); at the USAID/CAR Mission in Almaty (February 2001); and at the offices of PA Consulting (March 2001) during the wrap-up of EPIC/GGERI activities and the changeover of USAID/CAR GCC contractors.

⁸ See List of GGERI Reports and Other Outputs and Tasks and Deliverables Matrix (Annexes 3 and 4) for details.

2. Accomplishments

2.1 Introduction

The principal outputs and outcomes of GGERI can be tied to each of the specific tasks, as well as to several positive—though largely unanticipated—results relating to policy and institutional developments in Kazakhstan’s response to GCC and its ties to the international community engaged in such efforts.

This section reviews these accomplishments, beginning with GGERI’s institutional strengthening efforts. These include the establishment of a national framework of institutions charged with the task of encouraging the development and financing of early credit projects to reduce greenhouse gas emissions or enhance carbon sequestration. This section then reviews results, relating procedures for the identification and approval of projects and the registration of emissions credits they will generate. A sample of the top 10 percent of the 70 projects in the CCC Center’s GGERI-created database is reviewed to show the direction of current project development. Broader policy developments are also summarized, including those that encourage two new air pollution laws that were opportunistically assisted. Finally, the main international relationships relating to early credit project development and the sale of ERUs are described.

2.2 Institutional Capacity Established

A Seminar on Legal and Regulatory Options for Flexibility Mechanisms in Kazakhstan, organized and sponsored by the GGERI activity as its inception, took place in Astana in April 2000. It centered on presentations and discussions on international experience with the establishment of legal frameworks for national support to participation in UNFCCC and options in Kazakhstan consistent with lessons learned from this experience. The seminar attracted participants from academia, the government (including the ministries and agencies represented on the newly created Inter-Agency Commission), and the project development community. In their seminar recommendations, the participants confirmed the significance of activities to be carried out by the GGERI activity for Kazakhstan, and they underlined the importance of timely development of a national regulatory and institutional framework for early credit projects.

The new Inter-Agency Commission (IAC) was established in April 2000 to replace the former Inter-Agency Commission on Climate Change and was a direct outgrowth of previous EPIC and GGERI assistance that built understanding of the potential benefits to Kazakhstan of a more systematic approach to GCC responses—especially the development of greenhouse gas reduction projects. The IAC carried out its initial activities and meetings from May to December 2000. The government of Kazakhstan (via resolution of the prime minister, dated January 18, 2001) accepted the IAC report on its activities in 2000.

As the new IAC on Implementation of UNFCCC and Ratification of Kyoto Protocol was created under the chairmanship of Minister of Economy, participation of other relevant government ministries and agencies (such as the Ministries of Economy, Energy, Finance, Agriculture, and

Transport and the Agency for Strategic Planning) became more meaningful and regular. Government “ownership” of and commitment to the initiative increased steadily over the course of GGERI implementation.

The second work period of the CCC Center, as monitored by the IAC, corresponded with the final quarter of EPIC/GGERI assistance during January–March 2001. At its last sitting on March 21, the IAC reviewed the CCC Center’s work (as supported almost entirely by GGERI technical assistance) and made the following decisions and steps:

- (i) Instructed the CCC Center to finalize early credit MOUs with the World Bank Prototype Carbon Fund (PCF) and the government of the Netherlands, approving their drafts and recommending that the Ministries of Economy and of Environmental Protection sign the MOUs on behalf of Kazakhstan.
- (ii) Instructed the CCC Center to initiate dialogue with the government of Germany on negotiating and signing an MOU similar to the one negotiated with the Netherlands.
- (iii) Approved proposals on methodologies, criteria, rules, and procedures for preparation, screening, evaluation, approval, monitoring, verification, tracking, and registration of the early credit projects as the basis for drafting associated government regulations.
- (iv) Instructed the CCC Center to prepare proposals for a financial mechanism/instrument for early credit projects and the allocation of up to 7 million tons of CO₂-equivalent national greenhouse gas reduction credits to investors in early credit projects.
- (v) Created divisions in the Ministries of Environment and Economy responsible for the oversight of flexible mechanisms as applied to emission reduction efforts.
- (vi) Approved a proposal to legally incorporate the CCC Center as a non-governmental foundation authorized by the government to screen, evaluate, and recommend early credit projects for government approval and to serve as the national focal point for registering projects and tracking their progress and ERCs generated.
- (vii) Authorized the CCC Center to perform the core functions of screening, reviewing and preparing recommendations to the IAC (representing the government) for approval or disapproval of greenhouse gas reduction projects.

Work procedures for the IAC were spelled out in the IAC Statute—an attachment to the Government Decree of April 16, 2000, that established the commission. Proposals on essential elements of the CCC Center Operations Manual are included in the final report on *Criteria and Guidelines for Screening, Evaluating, and Approving Proposed Early Credit Projects*, prepared by a team of international and local GGERI consultants (see below).

A draft statute to establish the CCC Center as a legal permanent entity was developed by GGERI staff with the assistance of a local legal consultant and was submitted to the IAC and Ministry of Justice for approval in March 2001. This statute provides for the CCC Center’s legal status as a public foundation under the Kazakhstan Civil Code and government representation on its Board of Trustees. This was designed to allow the center to perform its IAC-authorized functions, collect fees for the services provided, and establish a fund-like mechanism to cofinance greenhouse gas reduction projects (see section on Project Pipeline). The main elements of the center’s operating manual—consistent with the proposed statute—also are in place in draft form.

The CCC Center is now widely recognized in Kazakhstan and internationally as the leading executive entity in Kazakhstan dealing with climate change (specifically with early credit projects). It has established contacts with JI project offices abroad and maintains regular information sharing and discussions with them. It also serves as a main facilitator of communications between potential early credit project investors (both public and private) and project sponsors/developers in Kazakhstan. Despite its limited resources, CCC Center is now assisting project developers with project preparation and encouraging them to submit project ideas for screening and evaluation. The CCC Center established and maintains liaison links to key ministries involved in the issue.

The Web site for the CCC Center was designed by GGERI local staff under supervision of the Team Leader. The site (www.climate.kz), presented in both Russian and English, is designed to address a wide variety of information, project evaluation, marketing, and outreach. It provides information about the CCC Center and IAC, Kazakhstan national criteria, procedures for screening, review, and approval of early credit projects, accepted methods for baseline assessment and ERC calculation, and project proposals offered to potential investors for consideration. It also includes a calendar of events and updates on policy developments relevant to the CCC Center's work. Though aspects of the Web site are still under construction, it is fully functioning and serves an important outreach role for the center in Kazakhstan and the world.

A systematic outreach program to potential project investors awaits the more complete development of bankable projects with clear economic benefits—including those generated by the sale of ERCs. GGERI staff, in conjunction with the CCC Center, carried out some preliminary marketing activities, and the existing (though limited) greenhouse gas investment community in Kazakhstan and abroad has come to be aware of opportunities in Kazakhstan and the development of project ideas by the CCC Center.

Considerable attention was given to developing the capacity of GGERI–Center staff to carry out public information and communication functions, and an initial communication and outreach information leaflet was prepared and disseminated to target audiences. The center's Web site is an important part of this outreach effort.

In addition to the GGERI staff based at the CCC Center, liaison staff were placed in the MEPNR and Ministry of Foreign Affairs (the staff member placed here was subsequently hired by the ministry to take responsibility for UNFCCC and Rio conventions after proving their worth and being trained under GGERI).

GGERI staff assisted USAID/CAR in developing the proposal to G/ENV for supplemental funding designed to help further develop country capacity to address aspects of GCC not directly related to GGERI, such as policy analysis and development at IAC and the CCC Center, organizational development of an NGO focused on GCC, and development of a pilot ER project.

In the fall of 2000, in recognition of the fact that the CCC Center was taking on an increasingly ambitious agenda, the Global Environment Bureau awarded a "Challenge Grant" of \$160,000 to further support the CCC Center's work to help develop the non-project aspects of its capacity.

2.3 Project Identification, Selection, and Current Prospects

An Inter-Agency Task Force on JI/CDM Project Methodologies and Criteria, comprising working-level specialists from relevant government ministries represented on the IAC, was established to review and approve proposals prepared by GGERI and the CCC Center. This Task Force interacted closely with GGERI staff and consultants who did much of the drafting of new procedures. Reports also were circulated for comment by recognized national experts. Finally, draft methodologies and procedures were presented at the final GGERI workshop in March 2001⁹ and approved by the IAC at its March 21, 2001 meeting as the basis for drafting corresponding Government regulations. This model proved efficient and effective, and it may be used in the future.

GGERI developed draft proposals, including a *Uniform Project Design Document* (UPDD) format, and presented them at the March 2001 workshop on early credit projects in Almaty and Astana to a wide audience, including project developers, field experts, and government officials. The proposals were prepared by a team of local and international experts in consultation with government officials and project developers. The draft proposals were endorsed by workshop participants and the IAC as the basis for government regulations on the subject.

Through development, discussion, and presentation of the draft procedures and routine work with project developers, GGERI achieved visible improvement of early credit project development capacity in Kazakhstan and, more broadly, understanding of costs and benefits of early credit projects in the government, private sector, and expert community.

Identification of early credit project proposals through GGERI outreach led to the accumulation of more than 70 project prospects in the CCC Center database. Many proposals already have received preliminary support from central, regional, or local governments. Several of them were presented at GGERI workshops and to international investors or submitted for screening by the CCC Center (see Table 2.1 for a sample).

The UPDD format was developed by GGERI consultants and approved by the IAC. Three UPDDs were completed or under final preparation for the Aktagay Small Hydropower Rehabilitation, Kumkol Gas Utilization, and Dzhungar Gate Wind Power projects. Table 2.1 provides summary information on the current top 10 percent of projects in the CCC Center's database developed through GGERI assistance.

Several *Project Idea Notes*—short summaries of proposed greenhouse gas reduction projects in Kazakhstan—were also developed by GGERI staff, screened by the CCC Center, and circulated to potential investors. These covered the three projects mentioned above, plus the Astana Green Belt Sequestration, Uralsk Gas Turbine Power Plant, and Karagandy Coalbed Methane Capture.

The concept for a National GCC Investment Fund to support smaller renewable energy and other greenhouse gas reduction projects was also presented at the March 2001 workshop. Its further

⁹ Workshop on Preparation of Greenhouse Gas Reduction Projects and Their Consideration and Validation by the Government of the Republic of Kazakhstan, March 15–21, 2001, Almaty and Astana (see Resolution of the Workshop Participants in Annex 2 of this report).

development was recommended by the workshop participants and approved by the IAC in their March 2001 decision. Small renewable energy or energy efficiency projects are difficult to finance due to high transaction costs relative to project size/value and “carbon revenue” generated. The concept was to create a financial intermediary (a national carbon or renewable energy fund) to aggregate carbon investor financing and invest in small individual projects in Kazakhstan. The fund would be capitalized with upfront contributions from such carbon investors/buyers as PCF, bilateral donors (like the government of the Netherlands), individual companies, and the like, and Kazakhstan’s royalties on carbon transactions. The fund would review and approve small individual projects and monitor them to relieve investors of the burden and offset their risk. A similar fund, expected to be partially financed by the PCF, has been established in Costa Rica. The IAC and CCC Center remain very interested in the concept and intend to move forward at some point.

GGERI initiated a regional outreach program on the subject of greenhouse gas reduction projects by participating in several workshops in the Atyrau region, a region likely to experience rapid energy sector development in the near future. To this end, the GGERI Team Leader gave a presentation on greenhouse gas emission reduction project development and other GCC responses at an Asian Development Bank–sponsored and widely-attended workshop on new developments in Kazakhstan’s environmental policies and management approaches. The EPIC GCC advisor also attended a USAID–sponsored meeting on energy efficiency issues in Atyrau to brief participants on potential links to reducing greenhouse gas emissions. The former Minister of Environmental Protection and Natural Resources, who was actively engaged with GGERI and other EPIC GCC–related activities, is now the Akim of Atyrau and can be expected to put his knowledge of the benefits of emission reduction to use in developing the region’s rich energy resources in an environmentally sound manner.

Capacity to design and evaluate projects was improved through participation of GGERI local staff together with government and project developers in national, regional, and international workshops and training in Bonn, Tashkent, Novosibirsk, Almaty, and Astana. The *CAR Greenhouse Gas Emissions Reduction Project Developer’s Manual* (prepared under the EPIC Program but outside of the GGERI activity) was updated and revised and is being distributed to interested parties through the CCC Center.

Guidelines on Methodologies and Procedures for Baseline Assessment, Validation, Monitoring, Verification, and Certification—dealing with baseline assessment, emission reduction/carbon sequestration calculations, validation, and monitoring/verification—were presented for comment at the final GGERI Workshop in March 2001. Similarly, *Criteria and Guidelines for Screening, Evaluating, and Approving Proposed Early Credit Projects* was presented at the workshop. Both documents were submitted to the IAC and approved at the end of March 2001 as the appropriate approaches to these subjects to be legally incorporated into regulations for their implementation through the CCC Center.

GGERI staff developed a database application to manage a system for project tracking and emission reduction registration and crediting at the center. The system uses the Microsoft Access database software and is designed to be easily converted to Oracle SQL software if data volume and structure warrant such a move. The basic look of the system may be seen in Annex 5.

Table 2.1
Top 10 Percent of Current Early Credit Project Prospects in the CCC Center Database

Project and Type	Developer/ Owner	Preparation Status	Potential Investors	Cost and Financing	Ranking/ Comments
Kumkol Gas Utilization	Hurricane Kumkol Munai	Feasibility study completed; UPDD underway; pre-engineering commenced	Hurricane Kumkol Munai/ Hydrocarbons, early credit or ERC trading	Baseline financing \$30m tentatively approved; seeking “carbon credits” financing	Highest ranked project in terms of probability of implementation
Aktagay Small Hydropower Rehabilitation	Jaryk	Pre-feasibility study completed; UPDD completed	Interest from Polish and Austrian groups/ Hydropower	Cost \$1.1m/ \$180,000 of owner equity	Robust project if not for financial additionality and weak project development capacity; candidate for government rural power loan
Dzhungar Gate Wind Power	Almatyavtomatika	Feasibility study and GEF Project Document completed; GEF Block C Grant pending; UPDD completed	GEF likely, and seeking other equity investors or lenders; government co-financing considered	Total cost \$5m; GEF grant of \$1m	GEF/UNDP co-financing likely; assistance needed identifying outside equity investors or lenders
Karagandy Coal Methane Capture	Ispat-Karmet	Pre-feasibility study completed with financing from govt. of Japan pending	Government of Japan and private sector (Mitsui Mining etc.); early credit project	TBD	Contingent on government of Japan funding for feasibility study and COP-6bis outcome
Uralsk Gas Turbine Power Plant	Govt. of Kazakhstan and govt. of Japan	Feasibility study completed with funding from govt. of Japan pending	GOJ and private sector (Tohoku Electric etc.); early credit project	TBD	Contingent on government of Japan funding for feasibility study and COP-6bis outcome
Almaty District Heating Rehabilitation	KazEnergo Proekt	Pre-feasibility study completed	TBD	TBD	Discussions planned on assistance needs; candidate for investment from Fondelec and similar funds
KazakOil Gas Utilization	KazakOil	Pre-feasibility study underway	TBD	TBD	Further discussions required to better determine scope

In sum, the GGERI activity—either directly or through the CCC Center—carried out the following key activities, creating the specific enabling conditions needed to make the development and registration of early credit projects and associated credits possible:

- Advanced preparation of several project proposals by assisting in the project presentation and analysis and development of several UPDDs.
- Facilitated contact between investors and project developers.
- Explained rules and procedures under development to potential early credit project investors.
- Instructed the CCC Center to develop a plan to engage key foreign investors (namely, major oil companies) in developing greenhouse gas reduction programs.
- Regularly participated in discussions between potential investors and sector ministries, the Ministry of Economy, and project developers and discussed the proposed procedures and sequence of evaluation and approval steps.
- Included CCC Center as the lead member and coordinator of an inter-agency task force to prepare in 2001 and start implementing in 2002 a government action plan on energy efficiency and greenhouse gas emission reduction that should result in confirmation/development of priority programs and the creation of a system of incentives for financing these programs.
- Accumulated about 70 proposals in the CCC Center database, ranging from early project ideas to advanced project proposals, out of which 7–10 are considered feasible in principle based on the information available, with greenhouse gas reduction potential of more than 10 MMT of CO₂ equivalent.
- Set up the framework to screen and evaluate project proposals in the next several months to test the newly developed rules and procedures and to present pre-approved proposals to investors through its Web site, various international forums, and other means.
- Proposed an outline concept for a fund-like instrument to finance renewable energy and energy efficiency projects that was approved by the IAC, which instructed the CCC Center to develop more detailed proposals based on this model.

2.4 Policy Developments

Assisted by GGERI, the GOK continued to develop its broader climate change policy. Particular assistance was provided on specific policy measures related to Kazakhstan's participation in international flexibility mechanisms for greenhouse gas reduction. The GOK made a policy commitment to host early credit projects and transfer resulting Emission Reduction Credits to investors. It now supports development of policies, legislation, and institutions in Kazakhstan—through its international contacts—to enable transparent and efficient implementation of such mechanisms.

The GOK also has decided to develop and implement its National Targeted Program on Energy Efficiency, Renewable Energy, and GHG Emission Reductions. Both the IAC and CCC Center will play a central role in the design, approval, and implementation of this program to add a greenhouse gas emissions reduction element to national energy policy. The CCC Center was made a member of the Program Design and Implementation Task Force, which also includes the Ministry of Energy, MNREP, and other key government agencies. It is widely expected that

development of the program will be implemented using a transparent and participatory approach advised by and drawing from GGERI experience.

Throughout implementation of the GGERI activity, the GOK continued its commitment to develop and adopt voluntary binding greenhouse gas emission reduction targets—making it one of the few UNFCCC parties without quantitative reduction obligations (non-Annex I parties) to voluntarily commit to making significant contributions to the mitigation of emissions.

The IAC was engaged in identifying high priority sectors for early credit project investments through regular meetings of GGERI staff with the member ministries and through workshops and seminars they attended. This created a multi-agency basis constituency for GGERI outputs and a wider understanding of GCC—especially greenhouse gas reduction projects—within the government. In this vein, GGERI experts also contributed to the work of the National Earmarked Program on Energy Efficiency and GHG Emissions Reduction, created by the government as a bridge between energy sector agencies and the work of the CCC Center.

At the April 2000 Seminar on Legal and Regulatory Options for Flexibility Mechanisms in Kazakhstan, it was recommended that institutional responsibility for project tracking and registration of emissions reduction credits (ERCs) should rest with the CCC Center and that only IAC-approved projects should get their credits registered. Regarding options for cost recovery and financial sustainability for the CCC Center, proposals of a general nature were submitted to the IAC, which, in turn, instructed the CCC Center to develop them further.

In August 2000, the Committee of the Majilis (the lower chamber of Kazakhstan's parliament) on Environment and Natural Resources approached GGERI with a request for technical assistance in reviewing two draft laws it was preparing: the Law on Protection of Atmospheric Air and the Law on Protection of Climate and the Ozone Layer. This presented a unique window of opportunity to introduce market-based instruments and incentives for reduction of emissions of greenhouse gas and other pollutants. As this activity was not specified in GGERI's work plan, USAID consent to allocate resources to this activity was sought and received.

GGERI played an important coordinating and advisory function in arranging broad-based participatory consultations on the drafts, involving not only government agencies but also NGOs, academics, local non-academic experts, and the private sector, including representatives of power generation plants and utilities owned or controlled by US companies. The draft Law on Protection of Atmospheric Air went through two rounds of consultations and through a complete government review. Committee hearings and submission to the full Majilis are the next steps in its passage. The committee created a consultative group that included a wide variety of stakeholders, including the CCC Center and a business roundtable group organized by the center. In May 2001 the Majilis committee held a roundtable on the draft laws that included all key stakeholders—an important step forward in the transparency and broader civil society participation in legislation.¹⁰ The government is nearing endorsement of the laws prior to their presentation to the Majilis for passage, and the drafts in their current form include innovative

¹⁰ See the latest update on this transparent consultative process posted on the CCC Center's Web site.

provisions for the introduction of market-based instruments to reduce air pollution—both local pollution and greenhouse gas emissions.

Over the entire period of its implementation, GGERI received strong and continuing support from relevant government agencies and officials. Traditionally, the MEPNR has played a leading role within the government on GCC matters. This leadership was reinforced by an active personal interest in the issue by Minister Daukeev (head of MNREP through the end of 2000). This is reflected in the fact that MOU governing implementation arrangements for GGERI was signed by MEPNR on behalf of the government of Kazakhstan. The earlier Inter-Agency Commission on Climate Change chaired by Minister Daukeev that existed until April 16, 2000, was not an active entity. In fact, other ministries and agencies participated in it but did not lend their political support to its work.

In addition, over the course of GGERI's implementation and other GCC-related EPIC tasks, the community of stakeholders with interest in the GCC subject in Kazakhstan substantially widened. AIREKET, the first environmental NGO in Kazakhstan that views GCC as its main priority, was established in March 2000 and actively participated in the COP-6 meetings. Both GGERI and other EPIC GCC-related activities contributed substantially to widening the base of local experts and academics knowledgeable about and engaged in GCC subjects. Project developers—both companies and individuals—also took active part in the development of key procedures and regulations (such as procedures for project review and government approval). Finally, foreign and local private sector companies that host or sponsor greenhouse gas reduction projects also became more aware of opportunities in this area and accelerated their project-related activities.

2.5 International Relationships Established

GGERI also advised the government on the development of process and procedures for concluding bilateral agreements on “early credits.”¹¹ GGERI staff assisted the CCC Center with the process of developing and reviewing such an agreement (with the Government of The Netherlands), and a procedure was established during this activity whereby CCC Center experts (in this case GGERI staff) reviewed draft documents and advised on their implications for Kazakhstan prior to their review by key IAC members. The IAC then recommended the agreement for signing by the authorized ministers representing the government of Kazakhstan. Discussions on cooperation with other countries and international organizations are also underway or have been explored (as with Poland, Finland, Australia, Japan, Canada, Germany, and the UK and PCF, UNDP, and EU TACIS).

¹¹ Under the terms of the Kyoto Protocol, credits can be “banked” from 2000 onwards, while early credits cannot be banked. Therefore, only credits transferred during 2008–12 are valid. At this stage it remains uncertain whether Kazakhstan's credits will be considered under early credit provisions. Hence, “early credits” comprise reductions generated now but somehow linked to credits to be issued later—through forward deals, options, and so on. The term *early credits* also is sometimes applied to pre-compliance credits. Since the international community has yet to agree on rules regarding early credits, all credits now on the market are “early.”

The databases of early credit office contacts and existing early credit offices and centers were compiled by GGERI staff and consultants prior to meetings with the above offices and in the above mentioned report, *Criteria and Guidelines for Screening, Evaluating, and Approving Proposed Early Credit Projects*. Meetings between CCC Center/GGERI staff and counterpart representatives in early credit project offices of other countries took place on a number of occasions (this included the United States, the Netherlands, Australia, Switzerland, Canada, Finland, and Japan). Discussions were held in conjunction with the 13th Session of Subsidiary Bodies on Scientific and Technical Advice (SBSTA) and Subsidiary Bodies on Implementation (SBI) of the UNFCCC held in Lyon in September 2000, during COP-6 in the Hague in November 2000 and during visits by GGERI staff to national offices throughout the GGERI implementation period.

GGERI and CCC Center staff—either jointly with USAID project management staff or separately—met with several potential early credit project investors (both public and private) and greenhouse gas emission brokers from North America, Europe, Japan, and Australia. Most noteworthy among them were:

- **Public sector:** World Bank PCF, government of the Netherlands (various agencies); Australian Greenhouse Office, government of Japan (NEDO), government of Finland (Inter-Ministerial Task Force on Climate Change), government of Switzerland, government of Canada (CIDA), Asian Development Bank, and United Nations Development Program.
- **Private sector:** EBRD/Daxia Energy Efficiency and Carbon Credits Fund (managed by Fondelec), Japanese Coal Association, Mitsui Mining, Chobu Electric, Tokyo Electric, Shell, Statoil, Natsource, CO2e.com, Evolution Markets, BCKK, Ormat National Power, Hurricane Hydrocarbons, AES, and the Polish-Kazakhstan Chamber of Commerce.

During meetings with investors and emissions brokers GGERI staff presented an outline of draft procedures for project screening, review, approval, monitoring, and verification being developed in Kazakhstan. GGERI staff also described project proposals (housed in the CCC Center database) to potential investors and brokers. In practice, the interest level among moneyed parties in early credit projects as investment opportunities was lower than initially hoped. Constraints seemed largely to be attributable to perceived country risks, uncertainty on global and national rules and modalities for implementation of flexibility mechanisms, and the early stage of development for most proposed projects. However, further information and the facilitation of contacts was requested for several proposals—particularly the Kumkol Gas Utilization and Aktagay Small Hydropower Rehabilitation projects.

3. Lessons Learned

3.1 Policy and Institutional Development

The GGERI activity enjoyed considerable success in helping to establish a policy and institutional framework conducive to development of greenhouse gas emission reduction and carbon sink enhancement projects in Kazakhstan as well as international participation in their design and financing. Several factors contributed to accomplishments in this area:

- Close cooperation with GOK agencies, the local expert community, private sector, and other stakeholders in designing and implementing GGERI activities.
- A concerted effort to develop local “ownership” of the GGERI’s activities by key government players who regard its work as an important national undertaking rather than just another externally imposed donor-funded activity or study.
- Development of GGERI/CCC Center national junior and mid-level staff and a broader cadre of professionals capable of supporting decision makers in the key ministries and agencies on these subjects.
- Extension of cooperation with the government beyond the executive to include the legislative Majilis and its Committee on Environmental Protection and Natural Resources.
- Direct participation in GGERI work by highly regarded and recognized domestic and international experts.
- Careful placement of GGERI’s work as integral part of national policies and programs for energy, environment, development, and climate change.
- Strong emphasis on good communications materials—briefing materials, presentations, reports—especially those targeting high-level officials and other key players.
- A productive blend of various forums for discussing and communicating important issues—from informal one-on-one meetings to well-prepared workshops and seminars.

At the same time the following lessons from challenges encountered—and still applicable to better achieving GGERI’s goals—also need to be taken into account:

- GGERI and the government should have paid greater attention to the legal status and guiding documents for new institutions regulating early credit projects to enable them to get up to speed quickly and function as fully authorized entities vis-à-vis project developers and investors.
- Qualified practical legal expertise should be readily available to the CCC Center and the IAC to meet the heavy demands for policy, legislative, and institutional development.
- There remains a need for closer coordination with UNFCCC Secretariat to ensure compatibility of national and international legal procedures relating to various GCC matters.
- The GGERI innovation of placing CCC Center liaison officers in key ministries and agencies should have been done sooner, since it paid off through speedier and more efficient coordination—demonstrating the value of human resources in the learning process.

- The creation of a standing and adequately supported task force to determine and manage national early credit project investment priorities in conjunction with development of the National Program for Energy Efficiency and greenhouse gas reductions would enable the government to complete and manage its strategy for attracting developers and funders and moving forward with greenhouse gas reduction projects.

3.2 Capacity, Methods, and Procedures

As in the case of policy and institutional development, GGERI implementation greatly benefited from its emphasis on a consultative and participatory process. Collaborative development of criteria, methodologies, and procedures for project preparation and evaluation and approval (as well as related guidelines and manuals) of international and local experts by joint teams—with participation by government specialists and local project developers—greatly increased local ownership and acceptance of the final product.

Another important lesson was the importance of identifying to the fullest extent possible capacity and materials developed by previous technical assistance—whether supported by USAID, UN agencies or other bilateral and multilateral donors—and building on the foundation of the best of these efforts. The participatory process also took into account state-of-the-art international best practices and outcomes of international negotiations as they proceeded.

Yet it became clear that significant gaps in the national capacity to design and evaluate investment projects could not be overcome during the GGERI implementation period, and these gaps will only be closed through further partnerships with international project developers and targeted on-demand assistance to project development teams by qualified international experts. Kazakhstan’s banking community and private sector companies also may be approached to second project evaluation specialists as part of this effort.

3.3 Promising Project Types

Through the end of the EPIC/GGERI implementation period, only a small number of the proposals presented to the CCC Center were technically and economically ready for screening and review. Additional resources for project development are clearly a high priority if many existing good project ideas are to be translated into credible projects.

Completion of the screening and preliminary approval process by the CCC Center for selected higher quality project proposals—coupled with Web and direct marketing—will help to attract investment. Inclusion of proposals for further development under bilateral assistance agreements would also spearhead further development of the project pipeline.

Kazakhstan has one of the least energy efficient economies in the world. Yet it has more than sufficient coal resources and coal-based power generation capacity to meet national electricity requirements under the “business as usual” economic growth scenario. Pricing and demand environments in the short term are not conducive to development of new power generation capacity. Therefore, most greenhouse gas mitigation projects involving ERC transfer are likely to be centered on both supply and demand-side efficiency improvements in the energy, industry,

and municipal sectors. Development of renewable energy sources—wind, small hydro, and solar power—is promising on a relatively small scale and as part of local solutions to rural power supply bottlenecks, provided that adequate financing mechanisms for such individual projects or clusters of investments are identified and other remaining institutional barriers removed.

3.4 US-Kazakhstan Relationships

GGERI was an offspring of the high importance given to climate change in US policy, driving its design and implementation period. The activity contributed substantially to a positive US–Kazakhstan policy dialogue on this subject. Its successful implementation was possible due to strong support from key government of Kazakhstan agencies and staff. Based on earlier EPIC assistance and early outreach efforts through the GGERI activity, many officials quickly recognized the potential of flexible mechanisms to ensure the country’s active contribution to addressing global warming—while at the same time bringing clear socioeconomic benefits and providing a market-based motivation to the transition to an energy-efficient, competitive economy. The addition of a project-oriented activity was a logical outgrowth of this cooperation and Kazakhstan’s expanding efforts to take part in and benefit from the developing market for greenhouse gas emission reduction credits.

USAID’s strong support—from GGERI’s design to implementation—was crucial to the activity’s success. During the activity’s approximate one-year implementation period, USAID was the only donor agency to provide substantial financial support for the development of institutional capacity in Kazakhstan to implement international greenhouse gas reduction projects. By its end, however, the activity had generated widespread attention on the subject. Several other donor agencies (such as UNDP, CIDA, UK DFID, and the governments of Japan and the Netherlands) are fully availing themselves of the CCC Center capacity created through GGERI as an anchor for their programs. The government of Kazakhstan has directly expressed positive views about the values of USAID’s pioneering role and continuing leadership in this area, as communicated to the US government by the chairman of the IAC, Minister of Economy Kulelekeev.

4. Conclusions and Next Steps

4.1 Principal Accomplishments

Kazakhstan now has one of the most advanced legal and institutional frameworks in the developing or transitioning worlds for using project-based international flexible mechanisms for the reduction of greenhouse gas emissions and the enhancement of carbon sinks. This framework will play an important role in future efforts to assist economic, energy, and environmental reform in Kazakhstan and form a basis for the country's full participation in UNFCCC and associated protocols.

4.2 Technical Assistance Priorities

A number of demands for further assistance have already been identified in previous sections. In looking ahead to possible future USAID and other international assistance to Kazakhstan as a follow-on to GGERI and other EPIC GCC-related activities, the areas most needing attention to their associated technical assistance requirements can be summarized as follows:¹²

- *Finalization of government regulations (based on documentation already prepared through GGERI) and their approval.* Local and international legal and institutional expertise, drafting and editing.
- *Completion of the CCC Center's legal development, including an organic statute, operations manual, independent financial accounts, and staffing plan (proposals already prepared and approved).* International and local legal expertise.
- *Interim financing of the CCC Center's operating costs at a level where it can function until other sources of financing—such as project processing fees—will convincingly materialize.* International and local financial expertise, plus GOK actions to allocate core funds.
- *Assistance to project developers to complete specific feasibility studies and engage investors.* International project development expertise and ERC marketing and investment promotion expertise (perhaps channeled through the creation of a Project Development Assistance Center managed as a CCC Center effort and separately funded).
- *Further project identification for planned IFI financing and private investment.* International and local financial expertise.
- *Continuing marketing of Kazakhstan's credits to be generated, including through the Web site and further development of international agreements.* International and local GCC and ERU marketing expertise.
- *Donor coordination, especially the orientation of upcoming CIDA assistance on project development, and business planning to support specific projects rather than generic*

¹² The main elements of these recommendations were presented in a separate memorandum and briefing to USAID (and the new GCC contractor in Kazakhstan) in late March 2001 as part of the transition at the end of the GGERI implementation period.

training. USAID intervention through donor dialogue in consultation with the government of Kazakhstan.

- *Expert assistance for the CCC Center to prepare a good analysis of options and recommendations as the government this year considers its quantitative target, strategy, and timing for Annex I/Annex B accession and needs convincing arguments that it will be compatible with economic growth—particularly in the oil and gas sector and power production.* International and local GCC policy expertise to complement project-based and energy-related assistance.
- *Support for a business forum on early credit projects.* International and local institutional and GCC expertise.
- *Encouraging US investors in Kazakhstan to develop greenhouse gas reduction programs in exchange for ERCs.* Education of foreign commercial service officers in this area and other outreach efforts.

4.3 Lessons Applicable Elsewhere

The GGERI experience provides an excellent blueprint for USAID programs to support flexible and market-based approaches to global climate change in other economies in transition—particularly the Newly Independent States and Southeastern Europe—and developing countries. It appears that the focus of the US foreign development assistance policy in the near future will continue to emphasize meaningful participation of both Annex I and non-Annex I countries in efforts to reduce anthropogenic greenhouse gas emissions, enhance carbon sinks, and develop national institutions to competently manage market-based instruments that achieve this participation. Further proliferation is expected of national and international markets for ERCs (Denmark Emissions Reductions Initiative, UK Emission Trading Scheme, future EU Emission Trading System, various state-level initiatives, PERT in Canada, and so on) that will involve ERC generated in transition economies and developing countries. This will make development of national institutional capacity to support effective participation in the international ERC market a high priority if benefits to aid economic growth and sound environmental management are to be realized.

Government institutions in all other Newly Independent States are structured similarly to those of Kazakhstan and respond in similar ways. Strategies, implementation arrangements, and deliverables developed for Kazakhstan—manuals, guidelines, and so on—can be relatively easily adopted for use in these countries, and this should significantly reduce costs and compress implementation time. Similar programs in developing countries may also benefit from applying GGERI experience to existing government institutions and developing new ones.

Among the most universally applicable lessons:

- Place a strong emphasis on careful, collaborative, and participatory design and implementation.
- Develop close relations with relevant government agencies and in the executive and legislative branches—working within the system to develop a high degree of national ownership.

- Adopt a patient perspective that acknowledges the need to establish a sound policy and institutional framework and foundation as the basis for progress on identifying and financing concrete projects.
- Recognize that, especially in transition economies, skills to conceptualize projects and prepare documentation on projects may constitute a critical bottleneck to be addressed.
- Support local reform-oriented mid-level government staff and experts as champions for policy and institutional reform and change agents.
- Focus on high quality written deliverables and other communications and their compatibility with local procedures and standards to ease their approval and absorption.

Annex 1
Memorandum of Understanding

**Between the Ministry of Natural Resources and Environmental Protection
of the Republic of Kazakhstan and the
United States Agency for International Development
on the Establishment of the Interagency Center on Global Climate Change**

Objectives

Recognizing the importance of taking active measures to mitigate the impacts of global climate change, the Parties agree that it is important to establish the Interagency Center on Global Climate Change (Center) to promote domestic and international efforts to reduce greenhouse gases in Kazakhstan.

Functions of the Center

The Parties understand that the Center will be responsible for guiding Kazakhstan's efforts to achieve the goals outlined in the United Nations Framework Convention on Climate Change (UNFCCC). USAID will provide advisory assistance in developing a system to evaluate Joint Implementation (JI) projects, manage JI credits, and attract foreign investment for JI activities. Specific assistance activities are outlined below under "USAID Responsibilities" and are described in greater detail in the Greenhouse Gas Emissions Reduction Initiative (GGERI) scope of work. Upon request, USAID will solicit support from other donors for those activities that are beyond the scope of the GGERI project mandate. Activities in this category may include but are not limited to: work on the national climate change strategy, development of emissions inventories and studies on vulnerability and adaptation to climate change impacts.

The Parties agree to the following responsibilities as related to the implementation of the GGERI project:

Mutual Responsibilities of the Parties

1. Develop a work plan for the Center
2. Conduct workshops on project packaging—including financial evaluation, valuation of carbon credits and least cost design approaches
3. Develop a national approval process for JI projects
4. Provide data to the Center necessary for operations (emissions data, project information, etc.)
5. Coordinate candidacies of long-term experts and consultants
6. Coordinate work specifications given to experts, consultants and other implementers
7. Allow free access to all materials resulting from the Center's activity

Kazakhstani Responsibilities

1. Designate a liaison for the GGERI project
2. Promote the development of legal procedures and regulations needed for the establishment and operation of the Center
3. Participate in meetings and workshops with experts provided through the GGERI project
4. Participate in meetings and workshops with experts provided through the GGERI project
5. Designate personnel to be trained through the GGERI project

USAID Responsibilities

1. Assist in establishing the Center's policies and procedures
2. Assist in developing methodologies for calculating baselines and emissions reduction potential consistent with IPCC guidelines
3. Assist in developing criteria and procedures for evaluating and approving projects
4. Assist in developing a database to calculate GHG credits (registry of carbon credits)
5. Assist in developing project monitoring and verification procedures consistent with IPCC guidelines
6. Assist in developing a pipeline of potential investment projects
7. Assist in attracting potential international investors through the development of a Website and other marketing tools
8. Render technical and organizational assistance in data collection and processing
9. Provide information support and marketing services for domestic use

By signing below, the Parties agree to the terms mentioned above and accept the outlined responsibilities. This Memorandum shall remain in effect for one year from the date of signature. Either party may terminate this agreement by letter from the head of the agency involved, (the Minister of Natural Resources and Environment Protection, or the Director of USAID/CAR).

Representative of the Ministry of
Natural Resources and
Environment Protection,
Republic of Kazakhstan

USAID Representative in the
Republic of Kazakhstan

Signed by both parties,
February 2000

Annex 2
Resolution of the Workshop Participants

**On Preparation of Greenhouse Gas Reduction Projects
and their Consideration and Validation
by the Government of the Republic of Kazakhstan**

Almaty–Astana

15–21 March 2001

1. Objective of the Workshop

To discuss and develop the process of Joint Implementation/Clean Development Mechanism (JI/CDM) projects preparation, screening and realization by specialists of governmental authorities and other operational entities, interested in attraction of investments to Kazakhstan, by representatives of national and private companies and foreign experts, officials of ministries and departments responsible for approval of proposed JI/CDM projects in Kazakhstan and by the involved potential developers/investors of projects aimed to reduce greenhouse gas (GHG) emissions in the Republic of Kazakhstan.

2. The Main Questions Discussed

1. Presentation, discussion and approval of the proposed criteria for screening, assessment and validation of JI/CDM projects for their realization in the Republic of Kazakhstan.
2. Presentation and explaining methodologies for baseline assessment, validation, monitoring, verification and certification procedures for obtaining financial credits to ensure emission reduction in Kazakhstan
3. Discussion of Inter-Agency Commission on the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol (IACCC)/Climate Change Coordination (CCC) Center roles in the process of JI/CDM projects screening, assessment, validation, monitoring and control, in the process of the proposed projects approval and registration, control and registration of transactions on emission reduction credits.

3. Results of the Workshop

Participants of the workshop approved the experts' suggestion on preparation of GHG emission reduction projects (**Unified Project Design Document**) to increase opportunities of their realization in the Republic of Kazakhstan, methodologies of baseline assessment, criteria and procedures for screening, evaluation and approval of the proposed JI/CDM projects by the Government of the Republic of Kazakhstan and developed the following recommendations and proposals:

4. Recommendations and Proposals by the Workshop's Participants

4.1 Establishment of Institutional Basis

4.1.1 To raise the role of the CCC Center through determination of its status and functions.

4.1.2. The IACCC to recommend the Government to approve the procedures of JI/CDM projects screening, evaluating and approving for validation by the Government of RK for their further realization in the Republic of Kazakhstan.

4.1.3 The CCC Center to contribute to attraction of investment resources for realization of projects on energy-saving and GHG emission reduction through conclusion of international agreements with international governmental and financial organizations.

4.2 Improvement of Legal Basis

4.2.1 The IACCC to provide assistance for accelerated development and governmental approval of normative documents, regulating the process of JI/CDM projects screening, evaluating, approving, registration, audit, monitoring and certification in the Republic of Kazakhstan.

4.2.2 The CCC Center to accelerate preparation of pilot CDM projects on industrial sectors, municipal economy and renewables to develop the process of their passing through the IACCC and governmental structures.

4.2.3 The IACCC to initiate development and approval at the governmental level of the procedure for registration and issuance to certain juridical persons (residents or non-residents) of certificates or other official documents, verifying certain GHG emission reductions during the identified period of time (project lifetime period).

4.2.4 The IACCC to initiate development and approval at the governmental level of normative documents, regulating Kazakhstan's participation in the international carbon credits market (GHG emission quotas).

4.2.5. The IACCC, with the object to identify priority JI/CDM projects and provide governmental support to these projects, to initiate development of the "Law on national policy in the spheres of energy generation and rational use and on governmental support to development of non-traditional and renewable energy sources," to revise the draft law on energy-saving and the current legislation regulating attraction of private sector to JI/CDM projects, to revise the program on energy-saving according to the UNFCCC and Kyoto Protocol, involving in this revision participants of the Workshop.

4.3 Establishment of Normative and Methodological Basis

4.3.1 The CCC Center to organize and maintain the bank of projects aimed to emission reduction/GHG removal, to monitor and keep the registry of project GHG emissions.

4.3.2 The CCC Center to introduce the unified format for submission of JI/CDM projects.

4.3.3 The IACCC/CCC Center to minimize and approve with other involved ministries and departments the terms of projects consideration and approval in the process of their validation.

4.3.4 The CCC Center to pay special attention to development of emission calculation methodologies for different economy sectors subject to peculiarities of the Republic of Kazakhstan.

4.4 Identification of Financial Mechanisms

4.4.1 The CCC Center to start search of financing sources for project development.

4.4.2 The CCC Center to develop and approve the flexible scheme of providing services on projects screening, evaluating and validation, and the procedures for collecting fees to cover CCC Center and IACCC expenses on the procedures.

4.4.3 To create the fund on energy-efficiency and renewable energy as a financial institution.

4.5 Establishment of Informational Base

4.5.1 The CCC Center to develop a glossary of terms necessary to understand the UN Framework Convention on Climate Change and Kyoto Protocol according to the terminology accepted and used in Kazakhstan.

4.5.2 The CCC Center to maintain a web-site in Internet on its activities to promote public awareness on the UNFCCC process, Kyoto Protocol and position of Kazakhstan on climate change issues.

4.5.3 The CCC Center to inform public through mass-media on problems caused by anthropogenic increase of GHG concentration in the atmosphere, to demonstrate and prove efficiency of projects related to GHG reduction with the aim to involve private business of the Republic of Kazakhstan in realization of these projects.

4.5.4 To provide maximal transparency of the CCC Center performance.

Annex 3
EPIC Program Reports on Climate Change

GGERI Reports

1. Criteria and Guidelines for Screening, Evaluating and Approving Proposed JI/CDM Projects (English)
 - Appendix 1: Unified Project Design Document (UPDD)
2. Legal Aspects of Flexible Mechanisms: International Prospective, Annie Petsonk
3. Legal Aspects of Flexible Mechanisms: Domestic Prospective, Irina Kubasova
4. Methodologies and Procedures for Baseline Assessment, Validation, Monitoring, Verification and Certification (English)
 - Appendix 1: Manual for baseline and crediting period determination
 - Appendix 2: Manual for the development of a project concept validation protocol
 - Appendix 4: Manual for the development of a verification and certification procedure
 - Appendix 3: Manual for the development of a greenhouse gas emissions monitoring plan
5. Program of the Workshop on Preparation of Greenhouse Gas Emissions Reduction Projects and their Review and Approval by the Government of the Republic of Kazakhstan (with list of participants)

Non-GGERI EPIC Climate Change Reports

1. An Export Strategy for Kazakhstan to 2005 (Based on an Evaluation of Kazakhstan's Alternative Oil Export Options; English), Adolf Feizlmayr, John Roberts, Matthew Sagers
2. Economic Instruments for Reduction of Greenhouse Gas Emissions in Kazakhstan (Course proceedings; Russian), Svetlana Ten
3. Economics of Climate Change: Implications for National Development (Seminar materials; English and Russian), various authors
4. Environmental Policy in Kazakhstan—Existing Legal Basis and Possible Future Directions, (Conference proceedings; Russian), various authors
5. Final Report of the EPIC/AED Study Tour on Economic Instruments for Greenhouse Gas Abatement—Training in Flexible Mechanisms for Kazakhstan (English), Theresa Sabonis-Helf
6. GHG Reduction Projects—Central Asia Project Developer's Manual (English and Russian)

7. Greenhouse Gas Emission Dynamic Projections in Kazakhstan: An Independent Appraisal of the Analysis in Progress (English and Russian), Alexander Golub and Dmintry Shaposhnikov
8. Kazakhstan and Climate Change Abatement: The Work Completed and the Path Ahead (English), Theresa Sabonis-Helf
9. Kazakhstan's Participation in the Framework Convention on Climate Change: Rationale, the Role of Technical Assistance, and the Agenda for the Future (English), Randall Bluffstone
10. Kazakhstan: What Is Happening with Our Climate? (Policy briefing brochure; Russian), Peter An
11. Kyrgyz Potentials in the United Nations Framework Convention on Climate Change and the Kyoto Protocol (Russian), Alexander Golub
12. Prevention of Climate Change: Moving from Debate to Practical Steps (English and Russian), Alma Raissova and Aliya Sartbayeva
13. Prognosis of Greenhouse Gas Emissions and Analysis of Their Reduction in Kazakhstan: Technical Report of the Working Groups (English and Russian), various authors
14. Project appraisal course notes (English and Russian), various authors
15. Report on the Use of Economic Instruments for Pollution Control and Natural Resources Management in the New Independent States—Kazakhstan (Russian), Zhan Muratbekov
16. Summary Global Statistics of Activities Implemented Jointly (English and Russian), Glenn S. Hodes
17. The Kyoto Protocol and Its Consequences for the Countries in Transition Not Included in Annex B (Russian), Daniel Dudek, Alexander Golub

Annex 4

Summary of Deliverables Relative to Requirements of the EPIC/GGERI 2001 Workplan

Task 4.1: GGERI Task Management and Reporting¹

Purpose: Preparation of workplans, routine reporting, and processing of USAID CTO and CO approvals.

Justification: Smooth management and administration, plus fulfillment of all USAID reporting requirements.

Sub-task elements	Outputs	Schedule	Deliverables submitted
a) Prepare monthly and quarterly activity reports	a) Monthly and quarterly reports	a, b) Monthly within one week of month's end; quarterly by January 15 for the 4th quarter CY2000 and March 15 for 1st quarter CY2001 (final financial report within 90 days of TO completion)	a) Monthly briefing memos; quarterly reports including GGERI filed for January–March, April–June, July–September, October–December 2000 (note that this report serves simultaneously as the report for the final quarter of January–March 2001)
b) Prepare monthly financial reports on GGERI tasks separate from other EPIC activities	b) Monthly		b) Monthly reports beginning in August 2000 on GGERI finances
c) Prepare final report on activities and results of project and lessons learned specific to the GGERI project	c) Final report on activities and results of project and lessons learned specific to the GGERI project	c) April 30, 2001	This report satisfies this deliverable.
d) Ad hoc status reports and information briefs	d) Reports, as agreed with USAID and partners	d) Intermittent	d) McNamara, Yelkin, Crooks briefed upon request on variety of occasions, and other reports supplied
e) Participate in discussions concerning scope of GGERI Workplan for CY2001 Q2–4 (if any)	e) Contributions to GGERI Workplan for CY2001 Q2–4	e) January–March 2001	e) Carried out in context of EPIC Task Order; Litvak assumed EPIC Chief of Party obligations on July 1, 2000; draft 2001 GGERI Workplan matrix discussed and submitted, used as aid to transition.

1. EPIC tasks 1.1–1.3 are linked with this task.

Task 4.2: Climate Change Coordination (CCC) Center Legal Framework Development

Purpose: Provide advisory assistance in developing regulatory and institutional framework for a working JI program and concluding bilateral agreements for early credits.

Justification: GOK needs to further develop comprehensive, clear, and practical legal, regulatory, and institutional arrangements for JI of GHG reduction and sink enhancement projects. GOK must create systems to regulate levels of domestic emissions and systems to track, register, transfer, and acquire emissions reductions units (credits).

Sub-task elements	Outputs	Schedule	Deliverables submitted
a) Assist the GOK to strengthen Inter-Agency Commission (IAC) and CCC, including completing legal authorization for CCC to conduct work	a) IAC work procedures prepared and submitted to the government and IAC for approval; CCC Statute and Operations Manual prepared and submitted for approval	a) IAC procedures: January 15, 2001; CCC Statute: January 15, 2001; CCC Manual: March 30, 2001	a) IAC established in April 2000; CCC designated IAC permanent working secretariat May 2000; IAC met in November and December 2000 and March 2001; Draft CCC Statute approved by IAC March 2001; CCC Manual elements submitted in workshop deliverables in March 2001
b) Provide legal seminars regarding needed frameworks	b) Participatory development of proposals for legal and regulatory infrastructure for JI system	b) First legal seminar: April 2000; second legal seminar: March 2001	b) First legal seminar completed; legal recommendations of next steps secured from Petsonk and Kubassova
c) Assist in developing new law(s) on air protection and climate change as basis for JI incentives	c) Assistance to Majilis in participatory consultations on new law(s) on air pollution/climate change containing provisions for JI	c) Consultations continuing: November 2000 to February 2001	c) Early draft distributed for comments to international and national legal experts and industry, comments collected and passed to authorities as inputs, membership of participatory consultations group agreed; draft law completed in October 2000; draft laws discussed in stakeholder hearings in 2001
d) Assist in developing procedures for concluding bilateral agreements on early credits (see tasks 4.5 and 4.6).	d) Recommendations to CCC, model bilateral agreement, assistance as needed	d) Recommendations: February 1, 2001; model agreement: March 1, 2001	d) Draft of JI MOU with the Netherlands prepared jointly with the Dutch; early draft MOU on cooperation prepared and distributed to AIJ/JI/CDM authorities of Finland, Switzerland, and Australia. Process established for IAC/CCC review and approval
e) Assist in developing GOK approved methodologies and criteria for JI project consideration (see task 4.3)	e) Recommendations for approval and subsequent revision of accepted methodologies and criteria	e) Recommendations submitted to IAC: March 2001	e) Preliminary interviews and consultations with the government agencies and IAC members conducted; recommendations presented at workshop in March 2001

Task 4.3: CCC Institutional Framework Development

Purpose: Provide advisory assistance in developing institutional framework for a working JI program.

Justification: GOK must develop CCC as a functioning and competent institution, appropriately staffed with qualified personnel, and capable of coordinating national JI program.

Sub-task elements	Outputs	Schedule	Deliverables submitted
a) Create ties to existing JI offices in other countries and international JI office cooperation arrangements, including through a staff exchange program	a) Database of JI office contacts; database of existing JI projects and centers; visits to Kazakhstan CCC by representatives of selected JI/CDM countries	a) Initial database completion: December 20, 2000; links placed on Web site: February 2001; program of visits: March 2001	a) Preliminary document summarizing world JI projects completed, preliminary document summarizing JI contacts completed, initial list of contacts compiled, links on Web site, database at the CCC established
b) Assist in determination of priority projects and sectors for JI investment.	b) Sector/project priority strategy incorporated in the Draft National Strategy, updates/revisions as required; recommendations to IAC on strategy; engagement of IAC in identifying priority sectors	b) Draft strategy chapter: March 31, 2001	b) Outline priority strategy included in Interim National Communication for COP-6 distribution in October 2000
c) Assist in institutional development of ERU tracking/registry system (see task 4.7)	c) Recommendations for institutional setup of tracking/registry system	c) First draft: March 2001	c) Beta program established and presented at workshop in March 2001
d) Assist in developing options for cost recovery and financial sustainability for CCC	d) Recommendations for IAC/CCC	d) February 2001	d) Preliminary ideas discussed in 2000; concept presented at workshop in March 2001
e) Assist in developing CCC liaison links to key ministries, agencies, and regions	e) Plan for liaison workstations/units and seconded staff in key Astana ministries	e) Plan by March 2001	e) Liaison officers with workstations established at Ministries of Environment and Foreign Affairs

Task 4.4: Develop Project Evaluation Capacity

Purpose: Create the capacity to evaluate potential JI projects on the basis of environmental (both GCC and co-benefits), national development, and financial considerations.

Justification: Clear procedures are needed to create a fair, transparent system of project review. These include standardized forms and procedures for receiving, evaluating, and approving JI projects. The IAC should approve the procedures developed and take the lead in implementing the regulations to establish the system.

Sub-task elements	Outputs	Schedule	Deliverables submitted
a) Conduct workshops on project packaging, including such topics as financial evaluation, valuation of carbon credits, and least cost design approaches	a) Increased capacity in project evaluation and development skills	a) First workshop: March 2001	a) GGERI staff participation in workshops in Tashkent, Bonn, etc.; GGERI workshop on this subject in March 2001
b) Revise and update manual for project developers on methods for developing GHG reduction projects	b) Manual in Russian and English revised/updated including contributions of regional and international experts	b) First update: October 2000	b) Update completed for second printing in October 2000
c) Develop: <ul style="list-style-type: none">methodologies for calculating baselines and emissions reduction or carbon sequestration for priority sectorscriteria and procedures for approving JI projectsproject monitoring procedures	c) Draft operations manual for CCC on methodologies, criteria, and procedures	c) First draft operations Manual for CCC: January 2000; Final draft: March 2001	c) Methodologies and manuals submitted in March 2001

Task 4.5: Develop Project Pipeline

Purpose: Identify JI opportunities and establish a consistent database and set of project materials.

Justification: GOK needs to know that it is getting the best possible deal in exchange for its credits at the same time it seeks investors. GOK must be able to: (1) offer attractive, reliable investment opportunities, (2) market projects to prospective investors, and (3) evaluate the final proposals based on criteria developed explicitly for this purpose.

Sub-task elements	Outputs	Schedule	Deliverables submitted
a) Encourage submittal of project proposals; locate existing projects and establish project appraisal units through applicant workshops, interviews, and other methods	a) Project proposal seminars and project recruiting; formal database of projects prepared	a) Ongoing, January 2000–March 2001	a) Project pipeline at CCC and submitted in final report
b) Develop standardized format for project applications	b) Standardized format for qualified projects selected	b) Draft format: December 2000; final draft submitted: March 2001	b) UPDD developed, presented, and approved by IAC in March 2001
c) Pre-screen projects for GHG potential and general viability; recommend best options for GOK consideration	c) List of pre-screened projects recommended for investors	c) March 2001	c) Eight project idea notes (PINs) selected and distributed to investors at COP-6 and later; project proposals presented to IAC in March 2001; IAC approved first two proposals.
d) Assist in developing mechanisms to finance small GHG reduction projects	d) Report and recommendations to IAC/CCC	d) Concept paper: March 2001	d) Discussions held with investors, consultants, and carbon funds; concept presented in March 2001

Task 4.6: Market JI Opportunities to Potential Investors

Purpose: Market pre-screened JI projects to potential investors and ensure that potential investors are aware of JI project opportunities in Kazakhstan.

Justification: Kazakhstan will need technical assistance in seeking investors. The first phase of AIJ demonstrated that finding investors for the first two or three JI projects in a given country is difficult. If those first projects are successful, subsequent investors will more readily consider the possibility of additional projects.

Sub-task elements	Outputs	Schedule	Deliverables submitted
a) Conduct a targeted marketing effort to relevant in-country and foreign investors	a) Marketing meetings and presentations for investors, development of marketing materials, Web-based marketing	a) Ongoing; brochure on JI opportunities and procedures in Kazakhstan: March 2001	a) Meetings with possible investors conducted; marketing materials on Web site
b) Develop public information department within CCC	b) Public information department within CCC; improved public awareness of CCC's goals and role	b) Ongoing, through March 2001; CCC brochure: February 2001	b) Draft public information program developed; information leaflet prepared; marketing information placed on Web site in March 2001
c) Develop information sharing arrangements and cooperation with other JI offices (see task 4.3)	c) Information sharing arrangements with other JI offices	c) Ongoing, beginning January 2001	c) Preliminary database of offices and contacts developed; negotiations underway for information sharing and cooperation arrangements

Task 4.7: Build Institutional Capacity to Track Greenhouse Gas Reduction Credits

Purpose: Strengthen CCC and local expert capabilities for tracking GHG credits associated with JI projects.

Justification: As projects move forward, GOK will have the responsibility to ensure the validity of investors' emissions credits. The CCC must track all credits promised for comparison with the inventory (though emissions credits are not anticipated to be realized for some time).

Sub-task elements	Outputs	Schedule	Deliverables submitted
a) Develop basic procedures for tracking credits (see task 4.2 and 4.3)	a) Procedures for tracking credits in the form of an established basic database and the initial database itself	a) Recommendations/outline procedures for tracking: January 2000; detailed procedures/database: March 2001	a, b) Beta version presented in March 2001 and being tested
b) Create a JI credit registry to track GHG credit obligations (see tasks 4.2 and 4.3)	b) Registry design	b) Design options: March 2001	

Task 4.8: Development of the CCC Web Site

Purpose: Design and activation of a Web site as a marketing and public information resource.

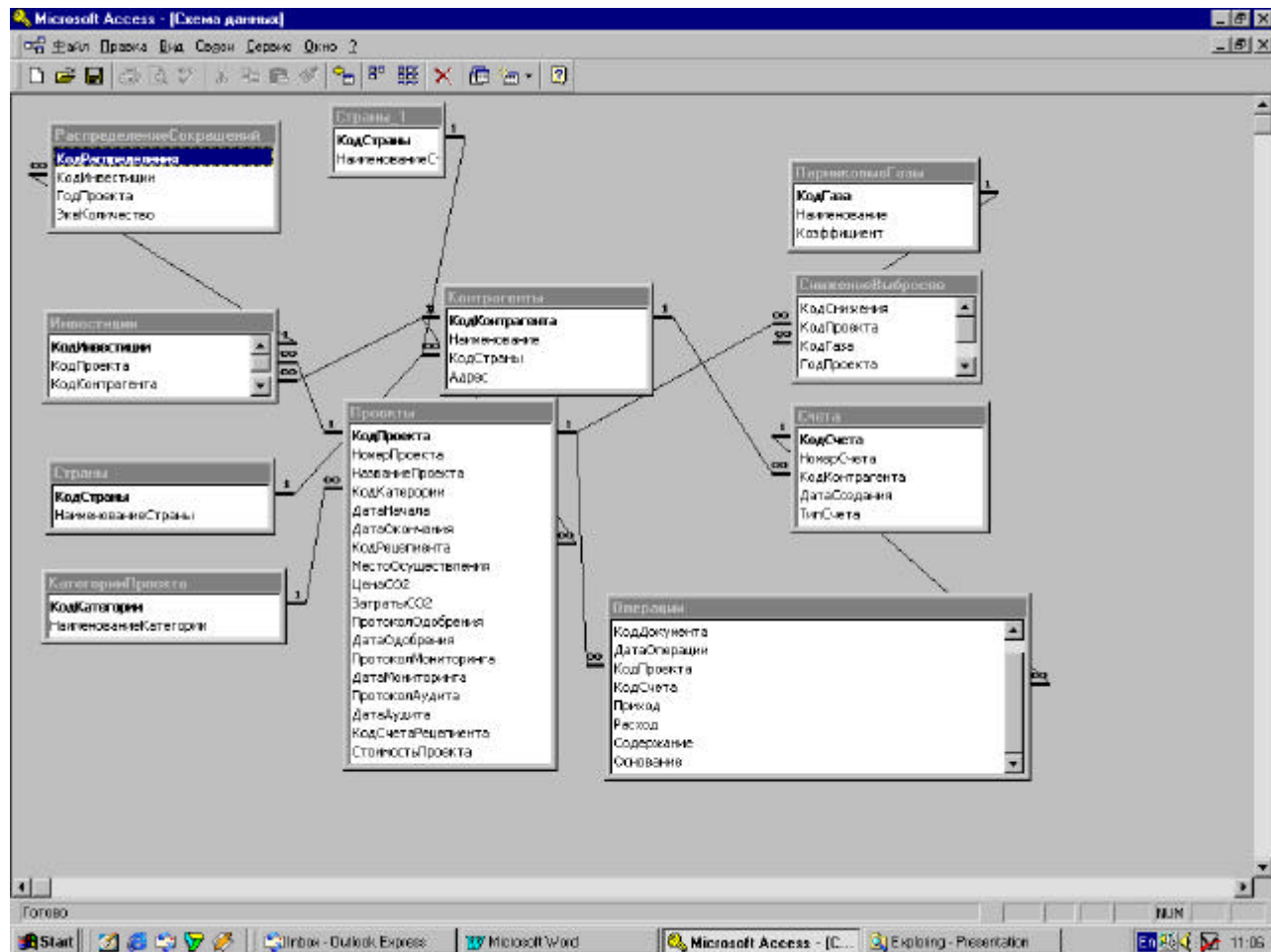
Justification: Outreach to domestic and international audiences is a critical component of the search for investors and establishment of broad-based policy support for GCC efforts in Kazakhstan. The Web site will assist with marketing, and the principle of transparency in CCC operations will be strongly reinforced if its own analysis is widely available to all interested parties.

Sub-task elements	Outputs	Schedule	Deliverables submitted
a) Develop Web site to post project pipeline, information on projects implemented, and general CCC information	a) Web site establishment and maintenance (see tasks 4.5, 4.6, and 4.7)	a) Web site operational: January 2001; further development ongoing through the end of March 2001	a) Web site operational
b) Hotlink Web site to domestic and international sites on climate change, energy, and environmental investment	b) Increased exposure and networking	b) February 2001	b) List of good Web sites included in appendix of the Project Handbook; link to CO2e.com discussed with CEO
c) Train at least one permanent CCC staff member to update and maintain the Web site	c) Move toward sustainability of the Web site (though this is beyond GGERI support)	c) Training: December 2000–March 2001	c) Staff trained, though their status is uncertain; consultants available who are able also to service the Web site

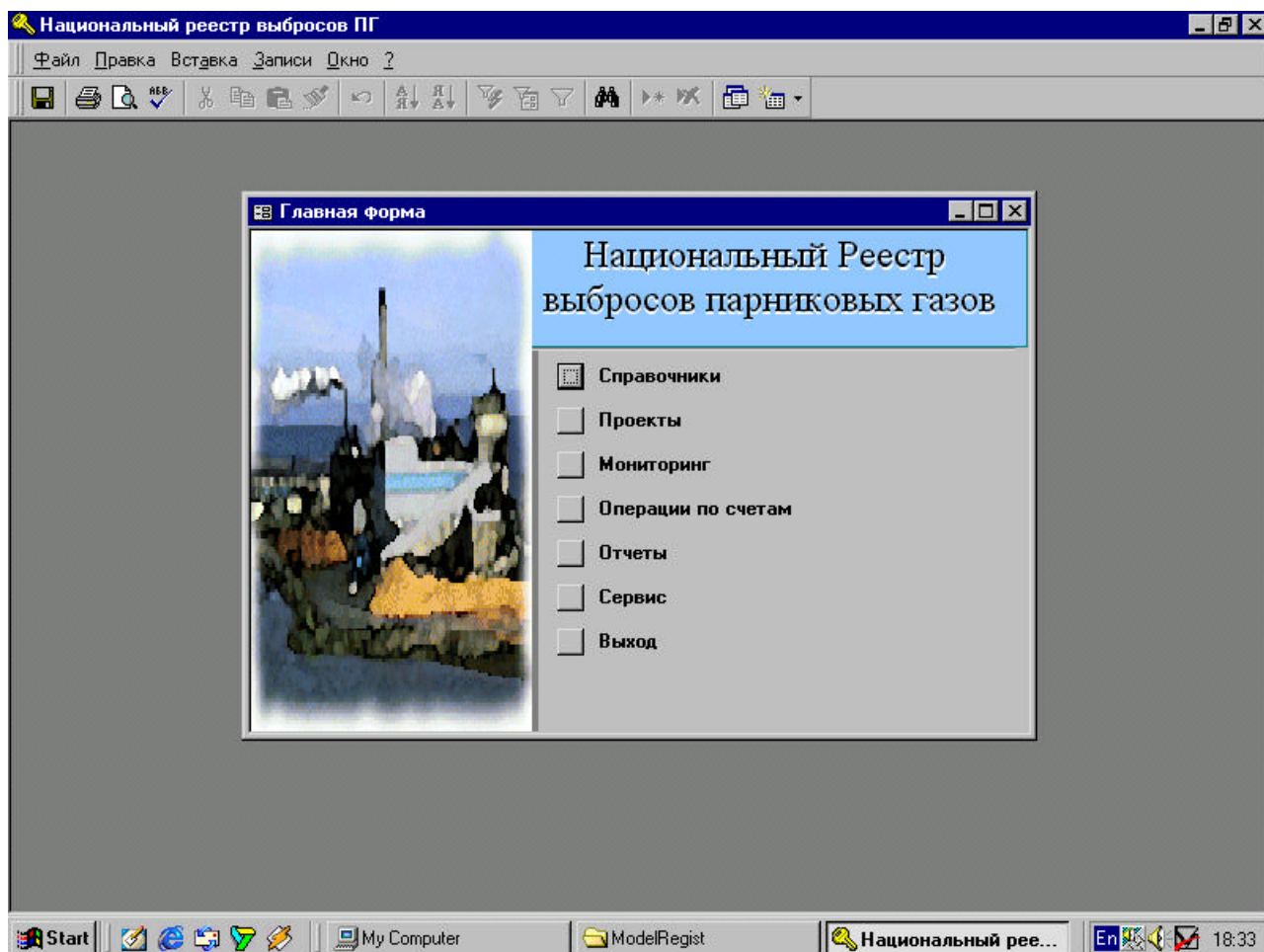
Annex 5

Project and Credit Tracking and Registry System

Database Architecture



Main Page



Project Account

Национальный реестр выбросов ПГ

Файл Правка Вставка Записи Окно ?

Проекты

Код: 1 Номер проекта: 001

Название: Строительство ветростанции мощностью 5 МВт в зоне Джунгарских ворот

Категория: Energy

Дата начала: 01.01.03 Дата окончания: 01.01.23

Реципиент: АО Алматыавтоматика

Счет реципиента: KAZ-001-01

Место осуществления: Восточно-Казахстанская область

Цена 1т CO2 экв.: \$15.00 Стоимость 1т CO2 экв.: \$12.25

Общая стоимость проекта: \$5 200 000.00

Прот. одобрения: №1 дата: 01.01.01

Прот. мониторинга: №1 дата: 01.01.02

Прот. аудита: №1 дата: 01.07.02

Проект. сокращение по годам

Год	Экв.Количеств
2003	21211
2004	21211
2005	21211
2006	21211
2007	21211
2008	21211
2009	21211
2010	21211

Запись: 1

Проектное сокращение ...

Инвесторы проекта

Инвестор	
ПРООН/ГЭФ	Unate

Запись: 1

Список инвесторов ...

Запись: 1 из 1

Start My Com... ModelRe... Нацио... Microsoft... Exploring... Microsoft... 18:39

Transaction Report

Национальный реестр выбросов ПГ

Файл Правка Вставка Записи Окно ?

Мониторинг

Номер: 001-2003 Дата: 31.12.03

Проект: 001 Год проекта: 2003

Стоимость 1т CO2 экв.: 13.00

Основание: Протокол мониторинга №001-2003 от 31/12/2003

Таблица сокращений

	Газ	Количество	Экв.Количество
▶	Carbone dioxide	20000	20000
*		0	0

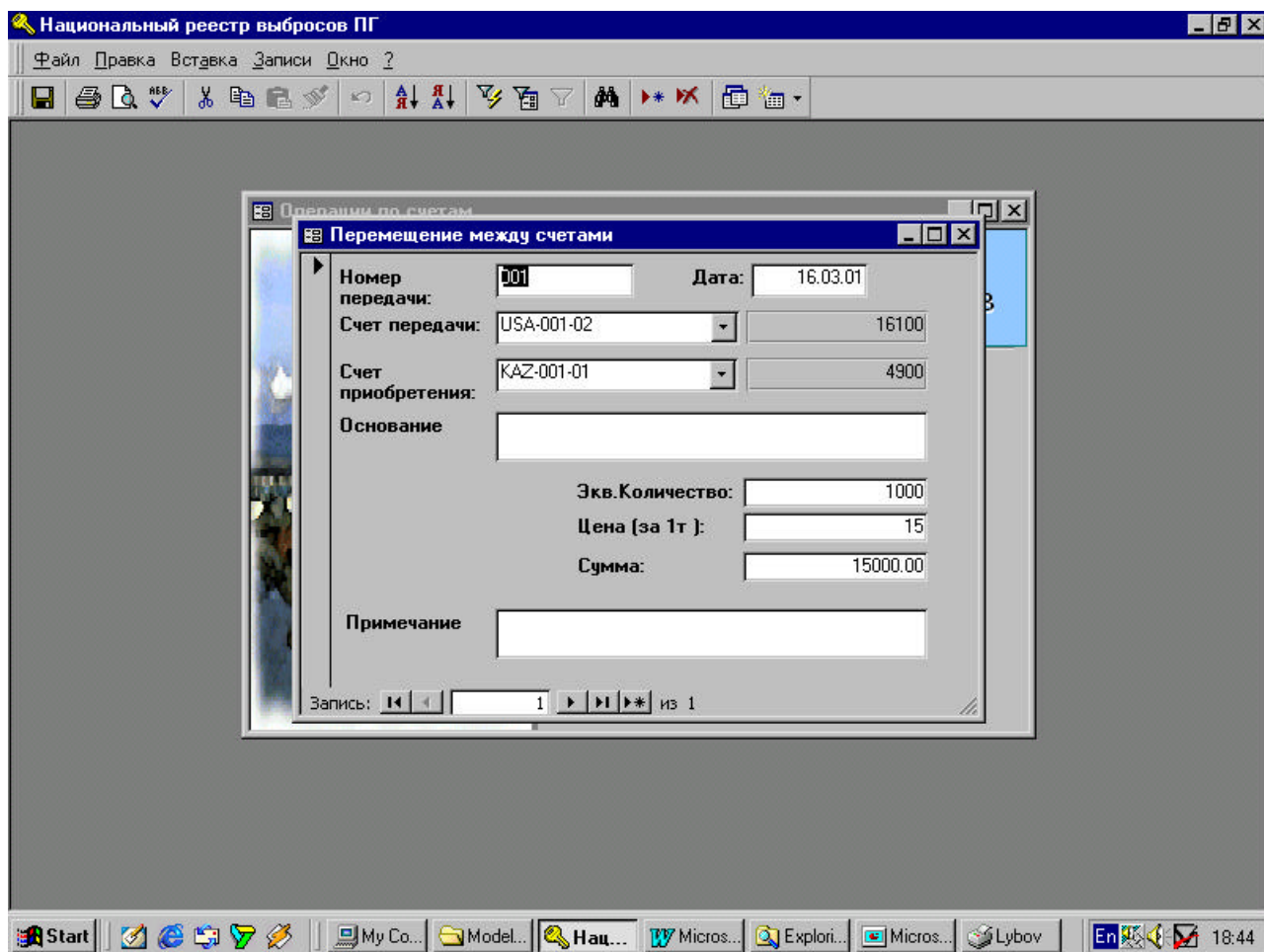
Запись: 1 из 1

Примечание:

Экв.Количество: 20 000.000 Сумма: 260000.000

Запись: 1 из 3

Start My Co... Model... Нац... Micros... Explori... Micros... Lybov En 18:43



Национальный реестр выбросов ПГ - [AccountCard : отчет]

Файл Окно ?

100% Закреть

Карточка счета № KAZ-001-01

Дата создания: 15 марта 2001 г. Тип ЕСВ

Владелец: АО Алматыавтоматика

Страна: KAZAKHSTAN

Дата операции	№ проекта	Приход	Расход	Остаток	Содержание операции	Основание
15.03.01	001	4 200.00	0.00	4 200.00		
		105 000.00	0.00	105 000.00		
16.03.01		1 000.00	0.00	5 200.00	Контракт №25 от 15.03.01	Контракт №25 от 15.03.01
		15 000.00	0.00	120 000.00		
31.12.03	001	4 000.00	0.00	9 200.00		Протокол мониторинг №001-2003 от 31/12/2003
		52 000.00	0.00	172 000.00		
31.12.04	001	4 300.00	0.00	13 500.00		Протокол мониторинг №001-2004
		68 800.00	0.00	240 800.00		

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Start My Co... Model... Нац... Micros... Explori... Micros... Lybov Ru 18:51

Национальный реестр выбросов ПГ - [Доходы от продажи кредитов по проектам]

Файл Окно ?

85% Закреть

Доходы от продажи кредитов по проектам

№ проекта	Название проекта	Объем снижений	Цена 1т CO2- экв.	Доход
001	Строительство ветростанции мощностью 5 МВт в зоне Джунгарских ворот			
	2003	21211	15	318165
	2004	21211	15	318165
	2005	21211	15	318165
	2006	21211	15	318165
	2007	21211	15	318165
	2008	21211	15	318165
	2009	21211	15	318165
	2010	21211	15	318165
	2011	21211	15	318165
	2012	21211	15	318165
	2013	21211	15	318165
	2014	21211	15	318165
	2015	21211	15	318165

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Start My Co... Model... Нац... Micros... Explori... Micros... Lybov En 18:45